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ABSTRACT

The purpose of this 1988 follow-up study was to augment findings previously obtained in a comprehensive needs assessment regarding appropriate physical education programming for mainstreamed students. The current educational needs of elementary and secondary public school teachers were determined. Information was sought on teachers' experience, existing abilities, attitudes, programming, expressed needs, and perceived limitations on handicapped learners. Results from 242 teachers indicated that a majority have not been involved in Individualized Education Program planning, believe that an adapted physical education placement must be provided, and need assistance in motor behavior assessment. A majority of the teachers were "neutral/mixed" in their interest toward teaching handicapped students. Also, teachers still base the exclusion of students on the nature of the individual's handicap, functional ability, and activity chosen. Results confirmed the belief that teaching professionals do not possess the competencies necessary to conduct physical education in the least restrictive environment. The survey instrument and response data are appended. (Author/JD)

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MOTOR DEVELOPMENT PROGRAMS FOR SCHOOL-AGED HANDICAPPED STUDENTS: A FOLLOW-UP NEEDS ASSESSMENT

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MOTOR DEVELOPMENT PROGRAMS FOR SCHOOL-AGED HANDICAPPED STUDENTS: A FOLLOW-UP NEEDS ASSESSMENT

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Abstract

In 1980, these investigators conducted a comprehensive needs assessment in the state of Ohio regarding appropriate physical education programming incident to PL 94-142. Recently, PL 99-457 was passed which reauthorized discretionary programs. The purpose of this 1988 follow-up study was identical to the original study. The current educational needs of elementary and secondary public school teachers were determined. A direct self-report methodology was utilized consisting of 26 items that included 131 sub-items. Information was sought on teachers' experience, existing abilities, attitudes, programming, expressed needs, and perceived limitations on handicapped learners. Of the 813 physical educators surveyed, 242 (30%) teachers responded. Results indicated that the vast majority of teachers (84%) have not been involved in the IEP process, most still believe that an adapted physical education placement must be provided, over 75% still need assistance in motor behavior assessment, and a majority of teachers rated no more than "neutral/mixed" their interest toward teaching handicapped students. Also, teachers are still basing the exclusion of students on the nature of the individual's handicap, functional ability, and activity chosen. Results confirm the belief that teaching professionals do not possess the competencies necessary to conduct physical education in the least restrictive environment. The survey instrument and response data are appended.

CONTENTS

	Page
Background	1
Project Overview and Significance	4
Methods and Procedures	7
Results and Conclusions	8
Experience in Teaching Learners with Special Needs	9
Existing Abilities of Teachers	10
Attitudes of Teachers Toward Handicapped Learners	11
Status of Physical Education Programming	14
Expressed Needs	16
Limitations on Handicapped Learners	18
Summary Statement	21
References	23
Appendix A - Survey Instrument	24
Appendix B - Questions and Question Responses	29

MOTOR DEVELOPMENT PROGRAMS FOR SCHOOL-AGED HANDICAPPED STUDENTS: A FOLLOW-UP NEEDS ASSESSMENT

Background

Professional educators and schools, in general, have had since 1978 to comply with the Education for All Handicapped Children Act (PL 94-142) and Section 504 of the Rehabilitation Act of 1973 (PL 93-112). Often overlooked or neglected in both of these provisions has been the fact that physical education (motor development) is to be a part of each handicapped child's education. In fact, physical education is the only curricular area specifically delineated in both legislative mandates. In PL 94-142, special education was defined as specially designed instruction to meet the unique needs of a handicapped child including classroom instruction, instruction in physical education, home instruction, and instruction in hospitals and institutions. The regulations for Section 504 also dealt specifically with physical education. Identical language was employed for preschool, elementary, secondary, and post-secondary education.

The concept of appropriate instructional methodology resulted in the emphasis on the Individualized Education Program (I.E.P.) which specifies that a program must be designed to meet an individual's unique needs. Therefore, physical education

(motor development) is considered a legitimate need, with its own goals and objectives, and not simply a method or means to an end.

In 1980, a comprehensive needs assessment was conducted in the state of Ohio (Loovis & Melograno, 1981; Melograno & Loovis, 1982) relative to the provisions for appropriate physical education programming incident to PL 94-142. More specifically, the study attempted to ascertain the educational needs of elementary and secondary public school physical education teachers. Several dimensions of perceived teacher needs in relation to physical education for learners with handicapping conditions were studied. Without dissecting the entire study, several significant findings are worth mentioning.

- Only 7% of the teachers who responded to the initial survey had had any involvement in the decision making process as it related to placement of students with handicapping conditions. This is noteworthy for a curricular area that is specifically delineated as part of students' special education.
- Teachers demonstrated significant misunderstanding as it related to knowledge of PL 94-142. For example, 63% thought that an adapted physical education placement had to be provided for each handicapped student.
- A majority of teachers indicated a general need for assistance in conducting motor behavior assessments. This is significant in light of the provision for

assessment prior to placement in the least restrictive environment.

- Respondents' positive attitude was evident when as a group, 63% of the teachers felt at least "favorable" toward teaching students with a variety of handicapping conditions. This positive attitude diminished when only 36% of the teachers were at least "somewhat interested" in teaching handicapped students compared to teaching non-handicapped students.

The results and conclusions from this study revealed several issues and problems regarding the continuous professional development of Ohio's physical educators relative to providing programs for handicapped students. Foremost among these problems was the need to clarify and identify the contribution of physical education to the IEP process (i.e., multi-disciplinary staffing). In general, physical educators seemed to lack a comprehensive understanding of PL 94-142 resulting in misunderstandings about their responsibilities. This aspect of the study was sufficient evidence to warrant continued emphasis on the rules and regulations of PL 94-142 as part of inservice activities. In regard to a vehicle for delivery of information about handicapped students in physical education, the data clearly established the use of activities other than graduate and continuing education courses.

In terms of job-related competencies, teachers generally

acknowledged that they needed information about assessment techniques, specific handicaps, and behavior management techniques. The teachers, as a group, reported a positive attitude toward providing education programs for handicapped students. However, the transformation from positive attitudes to the effective integration (inclusion) of handicapped students into regular class activities seemed unattainable. Teachers were still basing the exclusion of students on the nature of the individual's handicap, functional ability, and activity chosen.

Recently, the Education of the Handicapped Act Amendments of 1986 (PL 99-457) was passed which authorized discretionary programs under the Act. As with its predecessor, the new act defines special education as including instruction in physical education. Additional impetus for mandated physical education has been provided by PL 99-457 with special attention given to secondary education and transitional services for handicapped youth. Among other program priorities, emphasis will be directed toward: "Specifically designed physical education . . . programs to increase the potential of handicapped youths for community participation" (Section 626, B, 10).

Project Overview and Significance

Given the previous findings and the passage of PL 99-457, these investigators felt that it was timely to conduct a follow-up study similar in nature to the original 1980 study. The previous

study confirmed the fact that teaching professionals did not possess the curricular and instructional competencies which are necessary to effectively implement the IEP.

The purpose of this follow-up study was identical to the original study; that is, to conduct a comprehensive, follow-up needs assessment relative to the provisions for appropriate physical education programming for handicapped students incident to PL 94-142, PL 93-112, and now PL 99-457. More specifically, this study determined the current educational needs of elementary and secondary public school teachers. In addition, the conduct of a follow-up study permitted comparison of existing practice in 1988 with what was determined to be prevalent practice in 1980. In this way, it was possible to determine if physical education for students with handicapping conditions had improved, stayed the same, or became worse.

The public laws have clearly focused attention upon the curricular and instructional competencies associated with the delivery of quality educational programs. This needs assessment provided the data to address more accurately and logically, the exigencies of public school personnel responsible for the conduct of motor development programs for students with special needs. Once needs are identified and prioritized, then delivery systems can be developed and implemented that are designed to modify existing competencies or to develop new ones. The ultimate beneficiaries of this process will be students with special needs

who will be participating in programs of motor development designed with their needs in mind. The study had the following immediate objectives that attempted to:

1. Identify the perceived needs (e.g., curricular, instructional, facilities, equipment) of professional educators charged with the responsibility of providing motor development experiences to elementary and secondary students with special needs.
2. Determine the process-related competencies of professional educators such as planning, designing, implementing, and evaluating instruction which are considered essential to the delivery of motor development experiences for students with special needs.
3. Compare existing practice as it related to providing appropriate motor development experiences for students with special needs with what was determined to be prevalent - albeit not necessarily appropriate - practice in the early 1980s.

The study likewise had a long term objective which is to develop a viable delivery system for continuous professional development (inservice) of professional educators charged with the responsibility of providing motor development experiences for elementary and secondary students with special needs.

Methods and Procedures

The study examined dimensions of perceived teacher needs in relation to physical education for learners with handicapping conditions. In order to conduct a meaningful needs assessment, one that would yield the kind of information required to address teacher's needs, a direct self-report methodology was utilized. The mail questionnaire (direct self-report), developed for the 1980 study was used, as revised to the extent warranted in accordance with PL 99-457. It consisted of 26 items that included approximately 131 sub-items. The survey instrument appears in Appendix A. Various aspects were covered including: (1) experience in teaching learners with special needs, (2) existing abilities of teachers, (3) attitudes of teachers toward handicapped learners, (4) status of physical education programming for handicapped learners, (5) expressed needs, and (6) limitations on handicapped learners. Other areas were incorporated in relation to learners with special needs such as knowledge of the laws, curriculum offerings, instructional strategies, facilities, and equipment as these aspects relate to the implementation of PL 94-142, PL 93-112, and PL 99-457.

A random, statewide sample with oversampling in Northeast Ohio was drawn from the same population of 21 counties and 22 school districts that participated in the 1980 survey. The questionnaire was mailed to a total of 813 physical education teachers. In an attempt to increase response rate, a single

stage follow-up procedure was employed consisting of a postcard reminder. In addition, all respondents were eligible for a "prize" determined by draw. Completed questionnaires were returned by 242 teachers for a return rate of 30%.

Collected data were computer-analyzed in consultation with the Cleveland State University Computer Center. Survey data were coded on a personal computer and transferred to a mainframe computer for analysis utilizing an appropriate statistical package. Basic frequency and percentage data were calculated for each questionnaire item. In addition, two-way analyses were calculated across three categories; namely: sex (male/female), educational setting (urban/suburban/rural), and educational experience (5 year increments from 1 to 26 and over).

Results and Conclusions

Respondents (242) were evenly represented by males (48%) and females (50%); the average age was 38.1 years with a range of 23 to 64 years; and the average teaching experience was 14.2 years with a range of 1 to 33 years. Teachers who comprised the sample represented a variety of educational settings as follows: urban (80%), suburban (9%), and rural (9%).

Several conclusions that are drawn from the responses are relevant to those involved in professional development (inservice training) and professional preparation (preservice training). These conclusions are organized according to the various aspects

of the questionnaire which were previously identified. Specific frequency and percentage data are presented. The questionnaire item number from which these data were derived is indicated in parentheses. Item raw data appear in Appendix B.

Experience in Teaching Learners with Special Needs

Almost one-fifth (19%) of teachers who responded to the survey do not currently teach handicapped students in physical education (Item 11). This number seems destined to remain somewhat static since 52% of the teachers, on the average, indicated that handicapped students do not attend their school, while an additional 3.4% responded that these students attended their school but did not participate in physical education (Item 15). When teachers did respond that handicapped students participated in regular and/or segregated physical education classes, 94 (39%) teachers indicated they had less than 10 students in their program (Item 1). An additional 85 (35%) teachers revealed that no handicapped students participated in their physical education classes. Together, this accounts for 74% (179) of the teachers. This finding varied for teachers across different school settings as follows: urban (75%), suburban (67%), and rural (82%).

A significant finding revealed that only 35 (14%) teachers have served on a multi-disciplinary staff for the purpose of developing an IEP for handicapped students in physical education

(Item 8b). No difference was found between males (15%) and females (15%), but teachers from rural school settings (23%) served on IEP staffs to a greater extent than had teachers from urban (13%) and suburban (19%) school settings. In response to these data, two conclusions seem probable. First, physical education has been neglected by the "powers-to-be" in terms of involvement in the multi-disciplinary staff process. Second, physical educators have been remiss in becoming involved in the process. Both parties are accountable and share equally in this act of negligence.

Existing Abilities of Teachers

When discussing the present abilities of career physical educators in Ohio, it is with more than just passing interest to examine the extent to which adapted physical education courses were taken during undergraduate preparation. In this sample, 45 (19%) teachers reported having completed no adapted physical education course, while 24 (10%) teachers indicated having completed only a portion of a course (Item 21).

When asked to respond either "yes" or "no" to six interpretive statements pertaining to PL 94-142, only 51% of the teachers, on an average, answered all items correctly (Item 4). More specifically, two statements which should have been answered "no," but received "yes" responses more frequently, were indicative of the teachers' misunderstandings. Of those who

responded, the results were:

- 50% thought that mainstreaming meant educating all handicapped children in the regular classroom.
- 53% thought that an adapted physical education placement had to be provided for each handicapped student.

When requested to rate their perceived capability to implement PL 94-142, only 62% of the teachers, on an average, rated themselves at least "somewhat capable" (Item 5). These data reflect numerous misperceptions which surround the implementation of PL 94-142 in physical education programs. It also provides a picture of a profession which is, at best, split on the issue of whether it has the knowledge and/or skills to effectively teach handicapped students. Acknowledging this, it seems paradoxical that, on an average, only 46% of the respondents have made any attempt to increase their knowledge and/or skills to facilitate improved teaching effectiveness with handicapped students (Item 7).

Attitudes of Teachers Toward Handicapped Learners

A number of items was included to determine the respondents' attitude toward handicapped learners. When asked about their feeling toward teaching physical education to handicapped students, 152 (63%) teachers reported they were at least "favorably" inclined (Item 3). "Very favorable/favorable"

feelings were nearly identical for males (63%) and for females (65%). The number of at least "favorable" responses increased to 188 (78%) when the question was generally stated to include feelings about providing physical education for handicapped students (Item 10). Response by males (77%) was nearly the same as females (81%) in the "very favorable/favorable" categories. One possible explanation for the increase is that teachers may have distinguished between providing programs and their actually teaching handicapped students.

In general, respondents' attitude was moderately positive since, as a group, 48% of the teachers felt at least "favorable" toward teaching students with a variety of handicapping conditions (Item 12). This item covered 12 handicaps including a range of learning and behavioral disorders, physical impairments, sensory impairments, and other health related conditions. It becomes obvious, however, that this moderately positive attitude is diminished since only 85 (35%) teachers were at least "somewhat interested" in teaching handicapped students compared to teaching non-handicapped students (Item 20). In drawing any conclusion pertaining to the comparative interests in teaching handicapped vs. non-handicapped learners, it is acknowledged that 95 (39%) teachers reported "neutral" or "mixed" interest, while 56 (23%) teachers indicated that at best they were "somewhat uninterested."

In making this comparison between teaching handicapped vs.

non-handicapped learners, the two-way analyses resulted in some interesting information. Level of interest of males and females yielded no major differences across all response categories. Combined responses according to educational setting in the "very interested/somewhat interested" categories revealed that urban (37%) and suburban (38%) teachers were nearly identical while rural teachers (23%) showed less interest. With respect to educational experience, differences were found among teachers grouped with 1-5, 6-10, 11-15, 16-20, 21-25, and 26 or more years experience. The range of combined responses in the "very interested/somewhat interested" categories for these groups was 21% to 49%. These responses according to years experience revealed the following in descending order of interest:

- 1-5 years experience (49%)
- 26 or more years experience (43%)
- 16-20 years experience (37%)
- 11-15 years experience (36%)
- 6-10 years experience (25%)
- 21-25 years experience (21%)

In an attempt to summarize the attitudes of teachers toward handicapped learners, it appears that teachers in general, have favorable feelings towards teaching and providing programs for the handicapped. However, when providing inservice training, it should be recognized that: (1) males and females are similar in their attitudes, (2) attitudes may be more positive among

teachers in urban and suburban educational settings than in rural settings, (3) teachers with experience ranging from 6-25 years may be less responsive than teachers with less experience (1-5 years) or more experience (26 years or more), (4) nearly one-fourth of all teachers may be "somewhat uninterested" or "uninterested" in teaching handicapped learners; interest of most teachers (62%) may be no better than "neutral/mixed."

Status of Physical Education Programming

Teachers were given a list of 12 standard handicapping conditions; namely: amputation, arthritis, blind/visually handicapped, cardiac disorders, cerebral palsy, deaf/hearing impaired, severe behavior handicap, learning disabilities, mental retardation, muscular dystrophy, wheelchair-bound, and multihandicapped. They were asked if they needed additional information in order to work more effectively with each type of student (Item 13). With the exception of learning disabilities, over 58% (range 59% to 76%) of the teachers, on the average, indicated that they had such need. Learning disabilities was the only category for which a majority of teachers (53%) indicated that they did not need any information.

The most predominant reasons for needing more information in order to teach these students more effectively were "lack of program content" and "lack of specialized training." In response to cardiac disorders and deaf/hearing impaired, the two other

reasons for needing information were "fear of making the condition worse" and "can't communicate with them," respectively. In response to all of the handicap categories in terms of needed information, the other reasons of lesser consequence were "dislike being near them" and "need too much attention."

Apparently, teachers feel that they need information in order to be more effective with handicapped students, and they seem clear in expressing that their need is related to specific programmatic content and training issues. What is paradoxical to this need is the apparent lack of emphasis placed on physical education for handicapped students by district and building administrators. To emphasize this point, it is noteworthy that of those responding, a majority of teachers (51%) do not receive encouragement and support from their administrators to provide physical education to handicapped students (Item 16). The response to this item is shown in Table 1 for the cross-tabulation categories (sex, educational setting, and educational experience). The only teachers receiving strong encouragement and support from their administrators were those with 26 or more years experience (72%). The majority of male teachers (55%), suburban (58%) and rural teachers (52%), and teachers with 11-15 years experience (52%) received encouragement and support. By comparison, less than half of female teachers (42%) and urban teachers (42%) received encouragement and support from the administration along with the other educational experience categories.

TABLE 2

Proportions Receiving Encouragement and Support from Administration to Provide Physical Education for Handicapped Students (Item 16)

Categories	No	Yes
Sex:		
Male (N = 101)	45%	55%
Female (N = 107)	58%	42%
Educational Setting:		
Urban (N = 168)	53%	47%
Suburban (N = 19)	42%	58%
Rural (N = 21)	48%	52%
Educational Experience:		
1-5 Years (N = 42)	57%	43%
6-10 Years (N = 35)	54%	46%
11-15 Years (N = 40)	48%	52%
16-20 Years (N = 50)	54%	46%
21-25 Years (N = 22)	59%	41%
26 or More Years (N = 18)	28%	72%

Expressed Needs

When potential problem areas were specified and teachers were asked to respond to their needs, 73% of the respondents, on the average, indicated need for information across all items (Item 6). The data indicate that of the nine possible areas of need (Item 9), the following concerns were rated as "greatest" in need (in descending order of greatest need):

- Knowledge of PL 94-142
- Understanding of behavior management techniques
- Procedures for organizing and running adapted physical education programs

A majority (57%) of respondents indicated a general need for assistance in motor behavior assessment (Item 8a). The only area in which a majority of teachers felt confident was physical/motor fitness testing, with 120 (51%) teachers reporting no assistance necessary. While assessment of fundamental motor skills/patterns and sports skills testing was rated in need by 50% and 60% of the respondents, respectively, perceptual-motor development assessment was an obvious area of concern with 170 (70%) teachers indicating need for assistance.

As stated in the previous section, teachers were asked to report on "need for expanded knowledge of physical education programming" for a wide range of standard handicapping conditions. On the average, 67% of the teachers suggested they had such a need (Item 13). Teachers reported the "greatest" need (Item 14) for information concerning the following conditions (in descending order of greatest need):

- Severe behavior handicap
- Cardiac disorders
- Multihandicapped

These results were unexpected, given that these conditions qualify as low incidence populations.

Teachers revealed the extent to which they interact with medical and allied medical professionals relative to providing physical education for handicapped students (Item 19). Of those responding, 141 (60%) teachers indicated that they never engage in this form of consultation. These data correspond to a previous conclusion which identified "procedures for organizing and running adapted physical education programs" as a priority need.

Limitations on Handicapped Learners

Teachers were asked to indicate the limits on handicapped learners from participation in regular physical education classes (Item 17). The majority of teachers (above 56%) in each case specified the following limitations (in descending order of greatest limitation):

- Nature of the individual's handicap (76%)
- Functional ability of the individual (74%)
- Activity chosen (60%)
- Availability of facilities/equipment (56%)

Further analysis revealed that male and female teachers responded similarly in terms of the limitations on handicapped learners. Slight differences were indicated among teachers from the identified educational settings. "Activity chosen" was considered a greater limitation to suburban (71%) and rural (82%) teachers than urban teachers (58%). In rural settings, "presence

of architectural barriers" was a lesser limiting factor among teachers (23%) than teachers from either urban (37%) or suburban (38%) schools. Although all teachers considered "functional ability of the individual" and "nature of the individual's handicap" to be greater limiting factors, responses by rural teachers were markedly higher (86% and 91%, respectively). With respect to educational experience, comparative data are shown in Table 2. This table also includes cross-tabulation data for the other two categories (sex and educational setting). The greatest and least limiting factors are indicated in response to this item. In general, the greatest limiting factors were "functional ability of the individual" and "nature of the individual's handicap." The least limiting factor was "presence of architectural barriers."

A collateral concern in physical education programs that include handicapped students is the reactions of non-handicapped peers. In terms of hostility, ridicule, and/or resentment, 52% of the teachers reported that overall, almost no negative reactions were discernable, while 23% indicated that "some" negativism was present (Item 18).

TABLE 2

Proportions Indicating What Factors (Greatest and Least) Limit Handicapped Students from Full Participation in Regular Physical Education Classes (Item 17)

Categories	Factors					
	Activity chosen	Total number of students in the class	Functional ability of the individual	Nature of the individual's handicap	Availability of facilities/ equipment	Presence of architectural barriers
Sex:						
Male		(38%)	/76%/	/76%/		(37%)
Female			/75%/	/79%/		(34%)
Educational Setting:						
Urban			/75%/	/76%/		(37%)
Suburban	/71%/		/71%/	/76%/		(38%)
Rural	/82%/		/86%/	/91%/		(23%)
Educational Experience:						
1-5 Years			/78%/	/78%/		(36%)
6-10 Years	/70%/		/82%/	/80%/		(32%)
11-15 Years				/75%/		(27%)
16-20 Years			/72%/	/75%/		(37%)
21-25 Years			/76%/	/76%/		(34%)
26 Years and over			/86%/	/86%/	/76%/	

/ / = Greatest limiting factors

( ) = Least limiting factors

Summary Statement

The results and conclusions from this study reveal that several issues and problems persist in the continuous professional development of Ohio's physical educators relative to providing programs for handicapped students. Foremost among these problems seems to be the need to clarify and identify the contribution of physical education in the IEP process (i.e., the multi-disciplinary staff). In general, physical educators appear to lack a comprehensive understanding of PL 94-142 resulting in numerous misunderstandings about their responsibilities. This aspect of the study is sufficient evidence to warrant continued emphasis on the rules and regulations of PL 94-142 as part of professional preparation and inservice activities.

In terms of job-related competencies, teachers generally acknowledged that they needed information about assessment techniques, procedures for organizing and conducting adapted physical education programs, and behavior management techniques. The teachers, as a group, reported a positive attitude toward providing education programs for handicapped students. However, the transformation from positive attitudes to the effective integration (inclusion) of handicapped students into regular class activities seems less clear. Teachers are still basing the exclusion of students on the nature of the individual's handicap, functional ability, and activity chosen. As stated in 1980, handicaps do not exclude learners, but teachers and curricula do!

Eight years have produced very little change in the status of physical education for handicapped students in the state of Ohio. There is an obvious discrepancy between what is and what should be! The picture in the state of Ohio is currently one of noncompliance with federal regulations. Teachers indicated that handicapped students are present in their buildings but not in the physical education program - this is noncompliance! Teachers indicated that they are not involved in the IEP process including the testing of handicapped students prior to placement in least restrictive environments - this is noncompliance! "What should be" involves reversing the trends that are evident upon examination of the overall needs assessment data. All handicapped students should (must) be in physical education. Students whose needs cannot be met in regular physical education should be placed in an adapted physical education placement only after appropriate motor behavior assessment has been conducted and interpreted by persons qualified to do so.

These are merely a few suggestions that seem to eminate from this 1988 needs assessment. Obviously, the skills and knowledges necessary to achieve even the simplest recommendation will require a much more focused and intense effort on the part of the Ohio Department of Education, institutions of higher education, and local education agencies (hopefully working collaboratively). Only through such effort will any improvements be made in the quality and quantity of services provided to handicapped learners in physical education before the next needs assessment.

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APPENDIX A

Survey Instrument

CSU Cleveland State University

CODE: — 1101

ALL RESPONSES WILL BE HELD IN STRICT CONFIDENCE

Date _____

County _____ School District _____

Title of Person Completing This Form _____

Please check the box or circle the appropriate responses to the questions below. Feel free to add your comments on any question either on this form or on a separate sheet of paper. **Please** check an answer for all questions. Give the answer which is closest to your view if no response applies exactly.

LEAVE BLANK

1) What is the total number of handicapped students who participate in all of your physical education classes?
☐ 1. None ☐ 2. 1-5 ☐ 3. 6-10 ☐ 4. 10-14 ☐ 5. 15-19 ☐ 6. 20-39 ☐ 7. 40+

2) Of the handicapped students who participate, what number are:

1. _____ integrated into regular classes
2. _____ segregated into special classes
3. _____ both
4. _____ other (Please describe: _____)

3) What is your feeling toward teaching physical education for students with handicapping conditions?
☐ 1. Very favorable ☐ 2. Favorable ☐ 3. Neutral/Mixed ☐ 4. Unfavorable ☐ 5. Very unfavorable

4) Which of the following does the Education for All Handicapped Children Act of 1975 (P.L. 94-142) provide for?

a) Mainstreaming **all** handicapped children in the regular classroom ☐ 1. Yes ☐ 2. No

b) Funds at the local level to provide teachers with inservice activities designed to help them teach handicapped students. ☐ 1. Yes ☐ 2. No

c) An individualized education program for **each** handicapped student receiving special education. ☐ 1. Yes ☐ 2. No

d) Adapted physical education placement for **each** handicapped student. ☐ 1. Yes ☐ 2. No

e) Assessment of students' abilities with valid and reliable test instruments. ☐ 1. Yes ☐ 2. No

f) Parents' participation in the development of the individualized education program, including placement of the student in the appropriate physical education class. ☐ 1. Yes ☐ 2. No

5) P.L. 94-142 mandates that handicapped children receive, if necessary, special education including instruction in physical education. How capable are you in executing the following responsibilities:

a) Identifying federal and state legislative requirements associated with individualized education programs.
☐ 1. Very capable ☐ 2. Somewhat capable ☐ 3. Somewhat incapable ☐ 4. Very incapable

b) Developing an individualized education program for the handicapped student.
☐ 1. Very capable ☐ 2. Somewhat capable ☐ 3. Somewhat incapable ☐ 4. Very incapable

c) Demonstrating appropriate instuctional strategies in the classroom with handicapped students.
☐ 1. Very capable ☐ 2. Somewhat capable ☐ 3. Somewhat incapable ☐ 4. Very incapable

d) Effectively using commercial and teacher-made instructional materials.
☐ 1. Very capable ☐ 2. Somewhat capable ☐ 3. Somewhat incapable ☐ 4. Very incapable

e) Identifying federal and state legislative requirement associated with the principle of nondiscriminatory evaluation.
☐ 1. Very capable ☐ 2. Somewhat capable ☐ 3. Somewhat incapable ☐ 4. Very incapable

f) Identifying federal and state legislative requirements associated with the principle of mainstreaming.
☐ 1. Very capable ☐ 2. Somewhat capable ☐ 3. Somewhat incapable ☐ 4. Very incapable

g) Assessing educational placements in defining the least restrictive appropriate placement for a handicapped student.
☐ 1. Very capable ☐ 2. Somewhat capable ☐ 3. Somewhat incapable ☐ 4. Very incapable

6) Do you feel you need more information on each of the following in order to teach physical education to handicapped students more effectively?

1. Knowledge of P.L. 94-142 ☐ 1. Yes ☐ 0. No
2. Understanding the nature of specific handicaps ☐ 1. Yes ☐ 0. No
3. Techniques of motor assessment ☐ 1. Yes ☐ 0. No
4. Awareness of existing curricular materials ☐ 1. Yes ☐ 0. No
5. Knowledge of medical terms ☐ 1. Yes ☐ 0. No
6. Hands-on experience with handicapped students ☐ 1. Yes ☐ 0. No
7. Procedures for organizing and running adapted P.E. programs ☐ 1. Yes ☐ 0. No
8. Knowledge of class placement alternatives (i.e., special, adapted, and so on) ☐ 1. Yes ☐ 0. No
9. Understanding of behavior management techniques ☐ 1. Yes ☐ 0. No
10. Other _____
11. Other _____

LEAVE BLANK

7) Have you taken any steps to increase your knowledge of each of the following in order to teach physical education to handicapped students more effectively?

1. Knowledge of P.L. 94-142	☐ 1. Yes	☐ 0. No
2. Understanding the nature of specific handicaps	☐ 1. Yes	☐ 0. No
3. Techniques of motor assessment	☐ 1. Yes	☐ 0. No
4. Awareness of existing curricular material	☐ 1. Yes	☐ 0. No
5. Knowledge of medical terms	☐ 1. Yes	☐ 0. No
6. Hands on experience with handicapped students	☐ 1. Yes	☐ 0. No
7. Procedures for organizing and running adapted P.E. programs	☐ 1. Yes	☐ 0. No
8. Knowledge of class placement alternatives (i.e., special, adapted, and so on)	☐ 1. Yes	☐ 0. No
9. Understanding of behavior management techniques	☐ 1. Yes	☐ 0. No
10. Other _____		

8a.) In which areas of motor behavior assessment do you need assistance?

Fundamental Motor Skills/Patterns	☐ 1. No	☐ 0. Yes
Physical/Motor Fitness	☐ 1. No	☐ 0. Yes
Sports Skills Tests (including aquatics and dance)	☐ 1. No	☐ 0. Yes
Perceptual-Motor Development	☐ 1. No	☐ 0. Yes
Other (Specify) _____	☐ 1. No	☐ 0. Yes
Other (Specify) _____	☐ 1. No	☐ 0. Yes

b.) Have you served on a multi-disciplinary staff for the purpose of developing an individualized education program for a handicapped student?

☐ 1. No (Go to question 9) ☐ 2. Yes → How many times? _____

How rewarding was the experience for you?

☐ 1. Very rewarding ☐ 2. Somewhat rewarding ☐ 3. Not very rewarding ☐ 4. Very rewarding

9) Of the areas listed in questions 6 and 7, which three areas do you feel you have the greatest need for information about at the present time? Please list in order of greatest to least priority. (Only the *number* of these three alternatives need be given.)

#_____ #_____ #_____

10) What is your feeling toward providing physical education programs for students with handicapping conditions?

☐ 1. Very favorable ☐ 2. Favorable ☐ 3. Neutral/it depends ☐ 4. Unfavorable ☐ 5. Very unfavorable

11) Have you ever taught a student with each of the following conditions?

1. AMPUTATION	☐ 0. No	☐ 1. Yes
2. ARTHRITIS	☐ 0. No	☐ 1. Yes
3. BLIND/VISUALLY HANDICAPPED	☐ 0. No	☐ 1. Yes
4. CARDIAC DISORDERS	☐ 0. No	☐ 1. Yes
5. CEREBRAL PALSY	☐ 0. No	☐ 1. Yes
6. DEAF/HEARING IMPAIRED	☐ 0. No	☐ 1. Yes
7. SEVERE BEHAVIOR HANDICAP	☐ 0. No	☐ 1. Yes
8. LEARNING DISABILITIES	☐ 0. No	☐ 1. Yes
9. MENTAL RETARDATION	☐ 0. No	☐ 1. Yes
10. MUSCULAR DYSTROPHY	☐ 0. No	☐ 1. Yes
11. WHEELCHAIR-BOUND	☐ 0. No	☐ 1. Yes
12. MULTIHANDICAPPED	☐ 0. No	☐ 1. Yes
13. OTHER (PLEASE SPECIFY) _____	☐ 0. No	☐ 1. Yes

12) What is your feeling toward teaching a student with each of the following conditions?

	Very Favorable	Favorable	Neutral/ It depends	Unfavorable	Very Unfavorable	Don't Know
1. AMPUTATION	1	2	3	4	5	6
2. ARTHRITIS	1	2	3	4	5	6
3. BLIND/VISUALLY HANDICAPPED	1	2	3	4	5	6
4. CARDIAC DISORDERS	1	2	3	4	5	6
5. CEREBRAL PALSY	1	2	3	4	5	6
6. DEAF/HEARING IMPAIRED	1	2	3	4	5	6
7. SEVERE BEHAVIOR HANDICAP	1	2	3	4	5	6
8. LEARNING DISABILITIES	1	2	3	4	5	6
9. MENTAL RETARDATION	1	2	3	4	5	6
10. MUSCULAR DYSTROPHY	1	2	3	4	5	6
11. WHEELCHAIR-BOUND	1	2	3	4	5	6
12. MULTIHANDICAPPED	1	2	3	4	5	6
13. OTHER _____	1	2	3	4	5	6
14. OTHER _____	1	2	3	4	5	6

LEAVE BLANK

13) Do you feel a need to expand your knowledge of physical education programming for each of the following conditions in order to teach physical education for such students more effectively? If you feel that you need additional information in order to work more effectively with each of the following types of students, what are the reasons that contribute to your need? CHECK ALL THAT APPLY.

1. AMPUTATION — 0. No

1. Yes → ☐ 2. Can't communicate with them ☐ 3. Dislike being near them ☐ 4. Lack of program content
☐ 5. Fear make condition worse ☐ 6. Need too much attention ☐ 7. Lack of specialized ☐ 8. Other _____

2. ARTHRITIS — 0. No

1. Yes → ☐ 2. Can't communicate with them ☐ 3. Dislike being near them ☐ 4. Lack of program content
☐ 5. Fear make condition worse ☐ 6. Need too much attention ☐ 7. Lack of specialized training ☐ 8. Other _____

3. BLIND/VISUALLY IMPAIRED — 0. No

1. Yes → ☐ 2. Can't communicate with them ☐ 3. Dislike being near them ☐ 4. Lack of program content
☐ 5. Fear make condition worse ☐ 6. Need too much attention ☐ 7. Lack of specialized training ☐ 8. Other _____

4. CARDIAC DISORDERS — 0. No

1. Yes → ☐ 2. Can't communicate with them ☐ 3. Dislike being near them ☐ 4. Lack of program content
☐ 5. Fear make condition worse ☐ 6. Need too much attention ☐ 7. Lack of specialized training ☐ 8. Other _____

5. CEREBRAL PALSY — 0. No

1. Yes → ☐ 2. Can't communicate with them ☐ 3. Dislike being near them ☐ 4. Lack of program content
☐ 5. Fear make condition worse ☐ 6. Need too much attention ☐ 7. Lack of specialized training ☐ 8. Other _____

6. DEAF/HEARING IMPAIRED — 0. No

1. Yes → ☐ 2. Can't communicate with them ☐ 3. Dislike being near them ☐ 4. Lack of program content
☐ 5. Fear make condition worse ☐ 6. Need too much attention ☐ 7. Lack of specialized training ☐ 8. Other _____

7. SEVERE BEHAVIOR HANDICAP — 0. No

1. Yes → ☐ 2. Can't communicate with them ☐ 3. Dislike being near them ☐ 4. Lack of program content
☐ 5. Fear make condition worse ☐ 6. Need too much attention ☐ 7. Lack of specialized training ☐ 8. Other _____

8. LEARNING DISABILITIES — 0. No

1. Yes → ☐ 2. Can't communicate with them ☐ 3. Dislike being near them ☐ 4. Lack of program content
☐ 5. Fear make condition worse ☐ 6. Need too much attention ☐ 7. Lack of specialized training ☐ 8. Other _____

9. MENTAL RETARDATION — 0. No

1. Yes → ☐ 2. Can't communicate with them ☐ 3. Dislike being near them ☐ 4. Lack of program content
☐ 5. Fear make condition worse ☐ 6. Need too much attention ☐ 7. Lack of specialized training ☐ 8. Other _____

10. MUSCULAR DYSTROPHY — 0. No

1. Yes → ☐ 2. Can't communicate with them ☐ 3. Dislike being near them ☐ 4. Lack of program content
☐ 5. Fear make condition worse ☐ 6. Need too much attention ☐ 7. Lack of specialized training ☐ 8. Other _____

11. WHEELCHAIR-BOUND — 0. No

1. Yes → ☐ 2. Can't communicate with them ☐ 3. Dislike being near them ☐ 4. Lack of program content
☐ 5. Fear make condition worse ☐ 6. Need too much attention ☐ 7. Lack of specialized training ☐ 8. Other _____

12. MULTIHANDICAPPED — 0. No

1. Yes → ☐ 2. Can't communicate with them ☐ 3. Dislike being near them ☐ 4. Lack of program content
☐ 5. Fear make condition worse ☐ 6. Need too much attention ☐ 7. Lack of specialized training ☐ 8. Other _____

13. OTHER (PLEASE SPECIFY) — 0. No

_____

1. Yes → ☐ 2. Can't communicate with them ☐ 3. Dislike being near them ☐ 4. Lack of program content
☐ 5. Fear make condition worse ☐ 6. Need too much attention ☐ 7. Lack of specialized training ☐ 8. Other _____

14. OTHER (PLEASE SPECIFY) — 0. No

_____

1. Yes → ☐ 2. Can't communicate with them ☐ 3. Dislike being near them ☐ 4. Lack of program content
☐ 5. Fear make condition worse ☐ 6. Need too much attention ☐ 7. Lack of specialized training ☐ 8. Other _____

14) Of the conditions listed above which have you indicated you need more information on, which three do you need most? Please list in order of greatest to least need. (Only the *number* of each of these need be given.)

#_____ #_____ #_____

15) Of the following handicapping conditions, what is their current status in your school and physical education program? *(Please circle)*

	Do not attend the school at which I teach	Attend but do not have P.E. classes	Attend but have separate P.E. classes	Attend and are integrated into regular P.E. classes
1. AMPUTATION	1	2	3	4
2. ARTHRITIS	1	2	3	4
3. BLIND/VISUALLY	1	2	3	4
4. CARDIAC DISORDERS	1	2	3	4
5. CEREBRAL PALSY	1	2	3	4
6. DEAF/HEARING IMPAIRED	1	2	3	4
7. SEVERE BEHAVIOR HANDICAP	1	2	3	4
8. LEARNING DISABILITIES	1	2	3	4
9. MENTAL RETARDATION	1	2	3	4
10. MUSCULAR DYSTROPHY	1	2	3	4
11. WHEELCHAIR-BOUND	1	2	3	4
12. MULTIHANDICAPPED	1	2	3	4
13. OTHER (PLEASE SPECIFY) _____	1	2	3	4
14. OTHER (PLEASE SPECIFY) _____	1	2	3	4

16) Do you receive encouragement and support from your administration (i.e., principal, superintendent, school board, etc.) to provide physical education for handicapped students? Please describe.

☐ 1. Yes → What type of encouragement? _____

_____

☐ 0. No → What encouragement do you need? _____

_____

17) If handicapped students are placed in your regular physical education classes, what limits them from participating fully in activities with normal students? *(Please circle)*

	Yes	No
1. Activity chosen	1	0
2. Total number of students in the class	1	0
3. Functional ability of the individual	1	0
4. Nature of the individual's handicap	1	0
5. Availability of facilities/equipment	1	0
6. Presence of architectural barriers	1	0
7. Other (please specify) _____	1	0

18) In your integrated classes, how many of the regular students react to the students with handicaps by being:

☐ 8. Do not have integrated classes *(Go to Question 19)*

a. HOSTILE	☐ 1. Almost all	☐ 2. Most	☐ 3. About half	☐ 4. Some	☐ 5. Almost none
b. CURIOUS	☐ 1. Almost all	☐ 2. Most	☐ 3. About half	☐ 4. Some	☐ 5. Almost none
c. NEUTRAL	☐ 1. Almost all	☐ 2. Most	☐ 3. About half	☐ 4. Some	☐ 5. Almost none
d. ACCOMMODATING	☐ 1. Almost all	☐ 2. Most	☐ 3. About half	☐ 4. Some	☐ 5. Almost none
e. OVERLY CONSIDERATE	☐ 1. Almost all	☐ 2. Most	☐ 3. About half	☐ 4. Some	☐ 5. Almost none
f. RIDICULING	☐ 1. Almost all	☐ 2. Most	☐ 3. About half	☐ 4. Some	☐ 5. Almost none
g. RESENTMENT	☐ 1. Almost all	☐ 2. Most	☐ 3. About half	☐ 4. Some	☐ 5. Almost none

19) To what extent do you interact with the medical and allied medical (e.g., physicians, physical therapist, occupational therapist) professions in your community relative to providing physical education for handicapped students?

☐ 1. Never ☐ 2. 1-2 times per year ☐ 3. 3-5 times per year ☐ 4. 6-9 times per year ☐ 5. 10 or more times per year

20) How interested are you in teaching handicapped students (compared to teaching non-handicapped students)?

☐ 1. Very interested ☐ 2. Somewhat interested ☐ 3. Neutral/Mixed ☐ 4. Somewhat uninterested ☐ 5. Very uninterested

21) As an undergraduate, did you have any specialized instruction in teaching physical education to handicapped students?

☐ 1. None ☐ 2. Part of a course 3. One course 4. 2-4 courses 5. 4 or more courses

22) What was your age on your last birthday? _____ Years

23) What is your sex? ☐ 1. Male ☐ 2. Female

24) For how many years have you been teaching _____ Years

25) What is the approximate total enrollment of the school(s) at which you teach?

☐ 1. 0-200 ☐ 2. 200-500 ☐ 3. 500-1000 ☐ 4. 1000-1500 5. 1500-2000 ☐ 6. 2000+

26) Would you describe the school(s) at which you teach as: ☐ 1. Urban ☐ 2. Suburban ☐ 3. Rural

THANK YOU VERY MUCH FOR YOUR COOPERATION. Cleveland State University • Cleveland, Ohio • HPER Department

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APPENDIX B

Questions and Question Responses

TOTAL RESPONDENTS = 242 (100.0%)

Please check the box or circle the appropriate responses to the questions below. Feel free to add your comments on any question either on this form or on a separate sheet of paper. Please check an answer for all questions. Give the answer which is closest to your view if no response applies exactly.

1. What is the total number of handicapped students who participate in all of your physical education classes?

None	44	(18.2%)
1-5	61	(25.2%)
6-10	26	(10.7%)
10-14	25	(10.3%)
15-19	20	(8.3%)
20-39	23	(9.5%)
40+	35	(14.5%)
No response	8	(3.3%)

2. Of the handicapped students who participate, what number are:

Integrated into regular classes	146	(7.0 ave.)
Segregated into special classes	43	(4.7 ave.)
Both	32	(2.1 ave.)
Other (please describe:_____)	7	(0.4 ave.)

3. What is your feeling toward teaching physical education for students with handicapping conditions?

Very favorable	84	(34.7%)
Favorable	68	(28.1%)
Neutral/mixed	69	(28.5%)
Unfavorable	8	(3.3%)
Very unfavorable	2	(0.8%)
No response	11	(4.5%)

4. Which of the following does the Education for All Handicapped Children Act of 1975 (P.L. 94-142) provide for?

	Yes	No	No response
(a) Mainstreaming all handicapped children in the regular classroom	109 (45.0%)	107 (44.2%)*	26 (10.7%)
(b) Funds at the local level to provide teachers with inservice activities designed to help them teach handicapped students	113 (46.7%)*	98 (40.5%)	31 (12.8%)
(c) An individualized education program for each handicapped student receiving special education	137 (56.6%)*	76 (31.4%)	29 (12.0%)
(d) Adapted physical education placement for each handicapped student	115 (47.5%)	100 (41.3%)*	27 (11.2%)
(e) Assessment of students' abilities with valid and reliable test instruments	143 (59.1%)*	70 (28.9%)	29 (12.0%)
(f) Parents' participation in the development of the individualized education program, including placement of the student in the appropriate physical education class	135 (55.8%)*	79 (32.6%)	28 (11.6%)

*Correct response

5. P.L. 94-142 mandates that handicapped children receive, if necessary, special education including instruction in physical education. How capable are you in executing the following responsibilities:

	Very capable	Somewhat capable	Somewhat incapable	Very incapable	No response
(a) Identifying federal and state legislative requirements associated with individualized education programs.	20 (8.3%)	101(41.7%)	63 (26.0%)	51 (21.1%)	7 (2.9%)
(b) Developing an individualized education program for the handicapped student.	50 (20.7%)	124 (51.2%)	48 (19.8%)	13 (5.4%)	7 (2.9%)
(c) Demonstrating appropriate instructional strategies in the classroom with handicapped students.	48 (19.8%)	128 (52.9%)	48 (19.8%)	11 (4.5%)	7 (2.9%)

(Item continued)

(d) Effectively using commercial and teacher-made instructional materials.

73 (30.2%) 116 (47.9%) 35 (14.5%) 9 (3.7%) 9 (3.7%)

(e) Identifying federal and state legislative requirements associated with the principle of nondiscriminatory evaluation.

22 (9.1%) 95 (39.3%) 83 (34.3%) 35 (14.5%) 7 (2.9%)

(f) Identifying federal and state legislative requirements associated with the principle of mainstreaming.

30 (12.4%) 110 (45.5%) 60 (24.8%) 35 (14.5%) 7 (2.9%)

(g) Assessing educational placements in defining the least restrictive appropriate placement for a handicapped student.

30 (12.4%) 110 (45.5%) 64 (26.4%) 30 (12.4%) 8 (3.3%)

6. Do you feel you need more information on each of the following in order to teach physical education to handicapped students more effectively?

	Yes	No	No response
(1) Knowledge of P.L. 94-142	185 (76.4%)	52 (21.5%)	5 (2.1%)
(2) Understanding the nature of specific handicaps	197 (81.4%)	41 (16.9%)	4 (1.7%)
(3) Techniques of motor assessment	182 (75.2%)	56 (23.1%)	4 (1.7%)
(4) Awareness of existing curricular materials	198 (81.8%)	40 (16.5%)	4 (1.7%)
(5) Knowledge of medical terms	165 (68.2%)	71 (29.3%)	6 (2.5%)
(6) Hands-on experience with handicapped students	157 (64.9%)	79 (32.6%)	6 (2.5%)
(7) Procedures for organizing and running adapted P.E. programs	168 (69.4%)	69 (28.5%)	5 (2.1%)
(8) Knowledge of class placement alternatives (i.e., special, adapted, and so on)	179 (94.0%)	57 (23.6%)	6 (2.5%)
(9) Understanding of behavior management techniques	166 (68.6%)	69 (28.5%)	7 (2.9%)
(10) Other _____	12 (5.0%)	0 (0.0%)	230 (95.0%)
(11) Other _____	1 (0.4%)	1 (0.4%)	240 (99.2%)

7. Have you taken any steps to increase your knowledge of each of the following in order to teach physical education to handicapped students more effectively?

	Yes	No	No Response
(1) Knowledge of P.L. 94-142	78 (32.2%)	155 (64.0%)	9 (3.7%)
(2) Understanding the nature of specific handicaps	150 (62.0%)	84 (34.7%)	8 (3.3%)
(3) Techniques of motor assessment	115 (47.5%)	119 (49.2%)	8 (3.3%)
(4) Awareness of existing curricular materials	93 (38.4%)	141 (58.3%)	8 (3.3%)
(5) Knowledge of medical terms	120 (49.6%)	112 (46.3%)	10 (4.1%)
(6) Hands-on experience with handicapped students	142 (58.7%)	92 (38.0%)	8 (3.3%)
(7) Procedures for organizing and running adapted P.E. programs	111 (45.9%)	123 (50.8%)	8 (3.3%)
(8) Knowledge of class placement alternatives (i.e., special, adapted, and so on)	83 (34.3%)	149 (61.6%)	10 (4.1%)
(9) Understanding of behavior management techniques	118 (48.8%)	113 (46.7%)	11 (4.5%)
(10) Other_____	0 (0.0%)	1 (0.4%)	241 (99.6%)

8a. In which areas of motor behavior assessment do you need assistance?

	No	Yes	No response
Fundamental motor skills/ patterns	112 (46.3%)	121 (50.0%)	9 (3.7%)
Physical/motor fitness	120 (49.6%)	116 (47.9%)	6 (2.5%)
Sports skills tests (including aquatics and dance)	89 (36.8%)	147 (60.7%)	6 (2.5%)
Perceptual-motor development	64 (26.4%)	170 (70.2%)	8 (3.3%)
Other (specify)_____	1 (0.4%)	1 (0.4%)	240 (99.2%)
Other (specify)_____	1 (0.4%)	0 (0.0%)	241 (99.6%)

8b. Have you served on a multi-disciplinary staff for the purpose of developing an individualized education program for a handicapped student?

No	200 (82.6%)
Yes	35 (14.5%)
No response	7 (2.9%)

(If yes) How rewarding was the experience for you?

Very rewarding	11 (4.5%)
Somewhat rewarding	20 (8.3%)
Not very rewarding	4 (1.7%)
Very unrewarding	0 (0.0%)
No response	207 (85.5%)

9. Of the areas listed in questions 6 and 7, which three areas do you feel you have the greatest need for information about at the present time? Please list in order of greatest to least priority. (Only the number of these alternatives need be given)

#1	Knowledge of P.L. 94-142	26.9%
#9	Understanding of behavior management techniques	15.3%
#2	Understanding the nature of specific handicaps	14.9%
#3	Techniques of motor assessment	11.6%

10. What is your feeling toward providing physical education programs for students with handicapping conditions?

Very favorable	117 (48.3%)
Favorable	71 (29.3%)
Neutral/it depends	36 (14.9%)
Unfavorable	2 (0.8%)
Very unfavorable	3 (1.2%)
No response	13 (5.4%)

11. Have you ever taught a student with each of the following conditions?

	No	Yes	No Response
(1) Amputation	145 (59.9%)	84 (34.7%)	13 (5.4%)
(2) Arthritis	81 (33.5%)	151 (62.4%)	10 (4.1%)
(3) Blind/visually handicapped	109 (45.0%)	121 (50.0%)	12 (5.0%)
(4) Cardiac disorders	77 (31.8%)	155 (64.0%)	10 (4.1%)
(5) Cerebral palsy	113 (46.7%)	115 (47.5%)	14 (5.8%)
(6) Deaf/hearing impaired	80 (33.1%)	150 (62.0%)	12 (5.0%)
(7) Severe behavior handicap	66 (27.3%)	165 (68.2%)	11 (4.5%)
(8) Learning disabilities	7 (2.9%)	229 (94.6%)	6 (2.5%)
(9) Mental retardation	85 (35.1%)	145 (60.0%)	12 (5.0%)
(10) Muscular dystrophy	158 (65.3%)	69 (28.5%)	15 (6.2%)
(11) Wheelchair-bound	153 (63.2%)	75 (31.0%)	14 (5.8%)
(12) Multihandicapped	122 (50.4%)	89 (36.8%)	31 (12.8%)
(13) Other (please specify)	2 (0.8%)	20 (8.3%)	220 (90.9%)

12. What is your feeling towards teaching a student with each of the following conditions?

Very favorable	Favorable	Neutral it depends	Unfavorable	Very unfavorable	Don't know	No response
(1) Amputation						
85 (35.1%)	81 (33.5%)	55 (22.7%)	8 (3.3%)	3 (1.2%)	4 (1.7%)	6 (2.5%)
(2) Arthritis						
102 (42.1%)	95 (39.3%)	34 (14.0%)	3 (1.2%)	1 (0.4%)	1 (0.4%)	6 (2.5%)
(3) Blind/visually handicapped						
65 (26.9%)	77 (31.8%)	65 (26.9%)	15 (6.2%)	7 (2.9%)	5 (2.1%)	8 (3.3%)
(4) Cardiac disorders						
68 (28.1%)	76 (31.4%)	67 (27.7%)	11 (4.5%)	8 (3.3%)	4 (1.7%)	8 (3.3%)

(Item continued)

Very favorable	Favorable	Neutral it depends	Unfavorable	Very unfavorable	Don't know	No response
(5) Cerebral palsy						
69 (28.5%)	74 (30.6%)	51 (21.1%)	22 (9.1%)	6 (2.5%)	11 (4.5%)	9 (3.7%)
(6) Deaf/hearing impaired						
88 (36.4%)	84 (34.7%)	44 (18.2%)	9 (3.7%)	3 (1.2)	7 (2.9)	7 (2.9%)
(7) Severe behavior handicap						
55 (22.7%)	53 (21.9%)	70 (28.9%)	31 (12.8%)	22 (9.1%)	6 (2.5%)	5 (2.1%)
(8) Learning disabilities						
99 (38.0%)	93 (38.4%)	41 (16.9%)	2 (0.8%)	6 (2.5%)	1 (0.4%)	7 (2.9%)
(9) Mental retardation						
68 (28.1%)	77 (31.8%)	52 (21.5%)	16 (6.6%)	11 (4.5%)	9 (3.7%)	9 (3.7%)
(10) Muscular dystrophy						
63 (26.0%)	63 (26.0%)	69 (28.5%)	18 (7.4%)	7 (2.9%)	13 (5.4%)	9 (3.7%)
(11) Wheelchair-bound						
67 (27.7%)	56 (23.1%)	68 (28.1)	19 (7.9%)	12 (5.0%)	12 (5.0%)	8 (3.3%)
(12) Multihandicapped						
55 (22.7%)	41 (16.9%)	79 (32.6%)	24 (9.9%)	15 (6.2%)	15 (6.2%)	13 (5.4%)
(13) Other_____						
2 (0.8%)	2 (0.8%)	2 (0.8%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	236 (97.5%)
(14) Other_____						
2 (0.8%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	240 (99.2%)

13. Do you feel a need to expand your knowledge of physical education programming for each of the following conditions in order to teach physical education for such students more effectively? If you feel that you need additional information in order to work more effectively with each of the following types of students, what are the reasons that contribute to your need? CHECK ALL THAT APPLY.

☐ Can't communicate with them

☐ Dislike being near them

(Item continued)

- ☐ Lack of program content
- ☐ Fear make condition worse
- ☐ Need too much attention
- ☐ Lack of specialized training
- ☐ Other_____

	Yes	No	No Response
(1) Amputation	162 (66.9%)	71 (29.3%)	9 (3.7%)
(2) Arthritis	142 (58.7%)	91 (37.6%)	9 (3.7%)
(3) Blind/visually impaired	174 (71.9%)	59 (24.4%)	9 (3.7%)
(4) Cardiac disorders	161 (66.5%)	72 (29.8%)	9 (3.7%)
(5) Cerebral palsy	177 (73.1%)	56 (23.1%)	9 (3.7%)
(6) Deaf/hearing impaired	153 (63.2%)	79 (32.6%)	10 (4.1%)
(7) Severe behavior handicap	171 (70.7%)	62 (25.6%)	9 (3.7%)
(8) Learning disabilities	113 (46.7%)	119 (49.2%)	10 (4.1%)
(9) Mental retardation	157 (64.9%)	75 (31.0)	10 (4.1%)
(10) Muscular dystrophy	183 (75.6%)	50 (20.7%)	9 (3.7%)
(11) Wheelchair-bound	177 (73.1%)	56 (23.1%)	9 (3.7%)
(12) Multihandicapped	183 (75.6%)	50 (20.7%)	9 (3.7%)
(13) Other (please specify)	3 (1.2%)	3 (1.2%)	236 (97.5%)
(14) Other (please specify)	1 (0.4%)	3 (1.2%)	238 (98.3%)

14. Of the conditions listed above, which have you indicated you need more information on; which three do you need most? Please list in order of greatest to least need. (Only the number of each of these need be given)

#7 Severe behavior handicap 18.2%

#4 Cardiac disorders 11.2%

#3 Blind/visually impaired 9.5%

15. Of the following handicapping conditions, what is their current status in your school and physical education program? (Please circle)

	Do not attend the school at which I teach	Attend but do not have P.E. classes	Attend but have separate P.E. classes	Attend and are integrated into regular P.E. classes .	No Response
(1)	Amputation				
	172 (71.1%)	4 (1.7%)	10 (4.1%)	39 (16.1%)	17 (7.0%)
(2)	Arthritis				
	105 (43.4%)	5 (2.1%)	11 (4.5%)	106 (43.8%)	15 (6.2%)
(3)	Blind/visually handicapped				
	156 (64.5%)	3 (1.2%)	22 (9.1%)	47 (19.4%)	14 (5.8%)
(4)	Cardiac disorders				
	87 (35.9%)	18 (7.4%)	14 (5.8%)	104 (43.0%)	19 (7.9%)
(5)	Cerebral palsy				
	134 (55.4%)	6 (2.5%)	23 (9.5%)	64 (26.4%)	15 (6.2%)
(6)	Deaf/hearing impaired				
	121 (50.0%)	0 (0.0%)	20 (8.3%)	81 (33.5%)	20 (8.3%)
(7)	Severe behavior handicap				
	105 (43.4%)	4 (1.7%)	25 (10.3%)	94 (38.8%)	14 (5.8%)
(8)	Learning disabilities				
	27 (11.2%)	2 (0.8%)	33 (13.6%)	170 (70.2%)	10 (4.1%)
(9)	Mental retardation				
	124 (51.2%)	3 (1.2%)	25 (10.3%)	69 (28.5%)	21 (8.7%)
(10)	Muscular dystrophy				
	166 (68.6%)	8 (3.3%)	21 (8.7%)	26 (10.7%)	21 (8.7%)
(11)	Wheelchair-bound				
	166 (68.6%)	13 (5.4%)	18 (7.4%)	29 (12.0%)	16 (6.6%)
(12)	Multihandicapped				
	154 (63.6%)	12 (5.0%)	22 (9.1%)	28 (11.6%)	26 (10.7%)

Do not attend the school at which I teach	Attend but do not have P.E. classes	Attend but have separate P.E. classes	Attend and are integrated into regular P.E. classes	No Response
(13) Other (please specify) _____				
2 (0.8%)	1 (0.4%)	2 (0.8%)	9 (3.7%)	228 (94.2%)
(14) Other (please specify) _____				
0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (1.2%)	239 (98.8%)

16. Do you receive encouragement and support from your administration (i.e., principal, superintendent, school board, etc.) to provide physical education for handicapped students? Please describe.

Yes 101 (41.7%)

What type of encouragement?_____

_____

No 107 (44.2%)

What encouragement do you need?_____

_____

No response 34 (14.0%)

17. If handicapped students are placed in your regular physical education classes, what limits them from participating fully in activities with normal students? (Please circle)

		Yes	No	No response
(1)	Activity chosen	146 (60.3%)	63 (26.0%)	33 (13.6%)
(2)	Total number of students in the class	114 (47.1%)	96 (39.7%)	32 (13.2%)
(3)	Functional ability of the individual	179 (74.0%)	36 (14.9%)	27 (11.2%)
(4)	Nature of the individual's handicap	183 (75.6%)	35 (14.5%)	24 (9.9%)
(5)	Availability of facilities/ equipment	136 (56.2%)	80 (33.1%)	26 (10.7%)
(6)	Presence of architectural barriers	84 (34.7%)	122 (50.4%)	36 (14.9%)
(7)	Other (please specify) _____	13 (5.4%)	1 (0.4%)	228 (94.2%)

18. In your integrated classes, how many of the regular students react to the students with handicaps by being: NOTE: Do not have integrated classes - 31 (12.8%)

	Almost all	Most	About half	Some	Almost none	No response
(a) Hostile	1 (0.4%)	4 (1.7%)	7 (2.9%)	47 (19.4%)	134 (55.4%)	18 (7.4%)
(b) Curious	18 (7.4%)	25 (10.3%)	20 (8.3%)	88 (36.4%)	43 (17.8%)	17 (7.0%)
(c) Neutral	55 (22.7%)	52 (21.5%)	32 (13.2%)	40 (16.5%)	13 (5.4%)	19 (7.9%)
(d) Accommodating	52 (21.5%)	73 (30.2%)	24 (9.9%)	33 (13.6%)	13 (5.4%)	16 (6.6%)
(e) Overly considerate	13 (5.4%)	22 (9.1%)	25 (10.3%)	85 (35.1%)	47 (19.4%)	19 (7.9%)
(f) Ridiculing	1 (0.4%)	8 (3.3%)	7 (2.9%)	72 (29.8%)	104 (43.0%)	19 (7.9%)
(g) Resentment	2 (0.8%)	2 (0.8%)	5 (2.1%)	45 (18.6%)	138 (57.0%)	19 (7.9%)

19. To what extent do you interact with the medical and allied medical (e.g., physicians, physical therapist, occupational therapist) professions in your community relative to providing physical education for handicapped students?

Never	141 (58.3%)
1-2 times per year	65 (26.9%)
3-5 times per year	12 (5.0%)
6-9 times per year	4 (1.7%)
10 or more times per year	12 (5.0%)
No response	8 (3.3%)

20. How interested are you in teaching handicapped students (compared to teaching non-handicapped students)?

Very interested	27 (11.2%)
Somewhat interested	58 (24.0%)
Neutral/mixed	95 (39.3%)
Somewhat uninterested	30 (12.4%)
Very uninterested	26 (10.7%)
No response	6 (2.5%)

21. As an undergraduate, did you have any specialized instruction in teaching physical education to handicapped students?

None	45 (18.6%)
Part of a course	24 (9.9%)
One course	102 (42.1)
2-4 courses	54 (22.3%)
4 or more courses	9 (3.7%)
No response	8 (3.3%)

22. What was your age on your last birthday?

N = 232

Mean = 38.0 years

Median = 37.2 years

Range = 23 to 64 years

23. What is your sex?

Male	115 (47.5%)
Female	122 (50.4%)
No response	5 (2.1%)

24. For how many years have you been teaching?

N = 236

Mean = 14.3 years

Median = 14.2 years

Range = 1 to 33 years

25. What is the approximate total enrollment of the school(s) at which you teach?

0-200	5 (2.1%)
200-500	64 (26.4%)
500-1000	87 (35.9%)
1000-1500	52 (21.5)
1500-2000	17 (7.0%)
2000+	9 (3.7%)
No response	8 (3.3%)

26. Would you describe the school(s) at which you teach as:

Urban	194 (80.2%)
Suburban	21 (8.7%)
Rural	22 (9.1%)
No response	5 (2.1%)

MOTOR DEVELOPMENT PROGRAMS FOR SCHOOL-AGED HANDICAPPED STUDENTS: A FOLLOW-UP NEEDS ASSESSMENT

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Abstract

In 1980, these investigators conducted a comprehensive needs assessment in the state of Ohio regarding appropriate physical education programming incident to PL 94-142. Recently, PL 99-457 was passed which reauthorized discretionary programs. The purpose of this 1988 follow-up study was identical to the original study. The current educational needs of elementary and secondary public school teachers were determined. A direct self-report methodology was utilized consisting of 26 items that included 131 sub-items. Information was sought on teachers' experience, existing abilities, attitudes, programming, expressed needs, and perceived limitations on handicapped learners. Of the 813 physical educators surveyed, 242 (30%) teachers responded. Results indicated that the vast majority of teachers (84%) have not been involved in the IEP process, most still believe that an adapted physical education placement must be provided, over 75% still need assistance in motor behavior assessment, and a majority of teachers rated no more than "neutral/mixed" their interest toward teaching handicapped students. Also, teachers are still basing the exclusion of students on the nature of the individual's handicap, functional ability, and activity chosen. Results confirm the belief that teaching professionals do not possess the competencies necessary to conduct physical education in the least restrictive environment. The survey instrument and response data are appended.